

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of) Attorney Docket No.: ASAIN0165
Kangbin LEI et al) Confirmation No. Unknown
Serial No.: Unknown)
Filed: June 27, 2005) Group Art Unit: Unknown
)
) Examiner: Unknown
)
For: METHOD AND DEVICE FOR) Date: June 27, 2005
NUMERICAL ANALYSIS OF FLOW)
FIELD OF INCOMPRESSIBLER)
VISCOUS FLUID, DIRECTLY USING)
V-CAD DATA)

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. §1.56, this Information Disclosure Statement in connection with the above-identified application is being filed in accordance with 37 C.F.R. §1.97(b):

- ☒ within three months of the filing date of this application (not a C.P.A.);
- ☐ within three months of the date of entry of the National Stage;
- ☐ before the mailing date of a first Office Action on the merits; or
- ☐ before the mailing of a first Office Action on the merits of, after the filing of a Request for Continued Examination (RCE) under §1.114.

A copy of each non-U.S. document identified on the attached Forms PTO/SB/08B is attached, however, in accordance with Official Gazette Notice dated August 5, 2003, copies of the U.S. patents and patent application publications are not attached.

Attorney Dkt. No. ASAIN0136
Serial No. Unknown


Documents A -S are discussed in the present specification. Accordingly, no further comment with regard to the disclosures of these documents is believed to be required.

It is respectfully requested that the attached documents be considered and officially cited, and that the Examiner initial a copy of Forms PTO/SB/08B, and return them to the undersigned to indicate that the documents have been considered.

It is believed that the present Information Disclosure Statement complies with the requirements of 37 C.F.R. §§ 1.97-8, but should the filing of this paper necessitate a fee, the Director is hereby authorized to charge the necessary fee to Deposit Account No. 50-1281.

Respectfully submitted,

GRIFFIN & SZIPL, PC



Joerg-Uwe Szimpl
Registration No. 31,799

GRIFFIN & SZIPL, PC
Suite PH-1
2300 Ninth Street, South
Arlington, VA 22204
Telephone: (703) 979-5700
Facsimile: (703) 979-7429
E-mail: GANDS@szipl.com
Customer No.: 24203

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

Application Number	Unknown 10/540861
Filing Date	June 27, 2005
First Named Inventor	Kangbin LEI et al.
Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	ASAIN0136

Sheet 1 of 2

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	A	E.M. Saiki et al., "Numerical Simulation of a Cylinder in Uniform flow: Application of a Virtual Boundary Method", 1996, Journal of Computational Physics 123, pp. 450-465.	
	B	Yabe Takashi et al., 1999, "Solid-Liquid-Gas Unification Solving Method and CIP Method", Journal of Japan Society of Computational Fluid Dynamics, 7, pp 103-114.	
	C	T. Ye, et al., "A Cartesian Grid Method for Viscous Incompressible Flows with Complex Immersed Boundaries", University of Fla., 1999, AIAA-99-3312, pp. 547-557.	
	D	Akira NAKANO et al., "Numerical Simulation of Compressive... the Cartesian Grid System, Transactions of Japan Society of Mechanical Engineers, 1995, 61B-592, pp. 4319-4326.	
	E	Osamu ICHIKAWA et al., "Computation of the Flow Field... Using Cartesian Grid", Trans. of Japan Society of Mechanical Engineers, 68B-669, pp. 1329-1336.	
	F	BingHu PIAO et al., "Cartesian Grid Method for Incompressible Viscous Fluid Flow", 2000, Journ. of Japan Soc. of Fluid Mechanics, 19, pp. 37-46.	
	G	K. ONO et al., "An Application of Voxel Modeling Approach to Prediction of Engine Cooling Flow", Soc. of Automotive Engineers of Japan, Spring Convention, No. 984, pp. 165-168	
	H	http://kuwahara.isas.ac.jp/index.html .	
	I	S. TERAMOTO et al., "Flow Simulations around Three-Dimensional Objects Using a Cartesian Grid Method", 1998, Proc. of 12th Computational Fluid Dynamics Symposium, 299-300.	
	J	J.J. QUIRK, "An Alternative to Unstructured Grids for Computing Gas Dynamic Flows Around Arbitrarily Complex Two-Dimensional Bodies", Computers Fluids, 23, pp. 125-142.	

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Complete if Known	
		Application Number	Unknown
		Filing Date	June 27, 2005
		First Named Inventor	Kangbin LEI et al.
		Art Unit	Unknown
		Examiner Name	Unknown
Sheet 2 of 2	Attorney Docket Number	ASAIN0136	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	K	S.L. KARMAN, Jr., "SPLITFLOW: A 3D Unstructured Cartesian/Prismatic Grid, CFD Code for Complex Geometries", 1995, 33rd Aerospace Sciences Mtg. and Exh. AIAA 95-0343, pp 1-16.	
	L	C. W. HIRT et al., "Volume of Fluid (VOF) Method for the Dynamics of Free Boundaries", Journ. of Comput. Phys. 39, 1981, pp. 201-225.	
	M	C. W. HIRT et al., "Calculating Three-Dimensional Flows Around Structures and over Rough Terrain", Journ. Comput. Phys. 10, 1972, pp. 324-340.	
	N	Teshima KASE, "Volume Cad Development", Riken Symposium, Integrated Vol. CAD System Research, 1st Meeting, 2001, pp. 6-11.	
	O	I. TOYODA et al., "Analysis of Flow Around a Circular Cylinder Using Adaptive Cartesian Mesh Method", 13th Computational Fluid Dynamics Symposium, 1999, F03-1, CD-ROM.	
	P	H. Matsumiya et al., "Numerical Simulation of 2D Flow Around a Circular ...Finite-Difference Method", Trans. of Japan Soc. of Mech. Engineers, 1993, 59B-566, pp. 2937-2943.	
	Q	R. BOUARD et al., "The Early Stage of Development of the wake behind an impulsively started cylinder...", Journ. Fluid Mech., 1980, 101-3, pp. 583-607.	
	R	S. OKAMOTO et al., "Fluid Force Acting on Two-Dimensional Circular Cylinder in Lock-In Phenomenon", JSME International Journ., 2002, B45, No. 4, pp. 850-856.	
	S	N. KONDO, "Numerical Simulation for Aerodynamic Behaviors of a Circular Cylinder", 15th Computational Fluid Dynamics Symposium, 2001, E09-2, CD-ROM.	

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